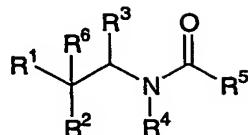


WHAT IS CLAIMED IS:

1. A compound of structural formula I:



(I)

5 or a pharmaceutically acceptable salt thereof, wherein;

R¹ is selected from:

- (1) aryl,
- (2) aryl-C₁-4alkyl,
- (3) heteroaryl,
- (4) heteroaryl-C₁-4alkyl,

10 wherein each alkyl is optionally substituted with one to four substituents independently selected from R^a, and each aryl and heteroaryl are optionally substituted with one to four substituents independently selected from R^b;R² is selected from:

- 15 (1) C₁-10alkyl,
- (2) C₃-10cycloalkyl-C₁-4alkyl,
- (3) cycloheteroalkyl,
- (4) cycloheteroalkyl-C₁-4alkyl,
- (5) aryl,
- 20 (6) aryl-C₁-4alkyl,
- (7) heteroaryl, and
- (8) heteroaryl-C₁-4alkyl,

25 wherein each alkyl is optionally substituted with one to four substituents independently selected from R^a, and each cycloalkyl, cycloheteroalkyl, aryl and heteroaryl is optionally substituted with one to four substituents independently selected from R^b;

R³ is selected from:

- (1) hydrogen, and
- (2) C₁-4alkyl,

30 wherein each alkyl is optionally substituted with one to four substituents independently selected from R^a;

R⁴ is selected from:

- (1) hydrogen, and

(2) C_{1-4} alkyl,

wherein each alkyl is optionally substituted with one to four substituents independently selected from R^a ;

R^5 is selected from:

5 (1) C_{1-10} alkyl,
(2) C_{2-10} alkenyl,
(3) C_{3-10} cycloalkyl,
(4) C_{3-10} cycloalkyl- C_{1-10} alkyl,
(5) cycloheteroalkyl- C_{1-10} alkyl,

10 (6) aryl- C_{1-10} alkyl,
(7) diaryl- C_{1-10} alkyl,
(8) aryl- C_{2-10} alkenyl,
(9) heteroaryl- C_{1-10} alkyl,
(10) $-OR^d$,

15 (11) $-S(O)_mR^d$, and
(12) $-NRCR^d$,

wherein alkyl, alkenyl, cycloalkyl, and cycloheteroalkyl are optionally substituted with one to four substituents independently selected from R^a and cycloalkyl, cycloheteroalkyl, aryl and heteroaryl are optionally substituted with one to four substituents independently selected from

20 R^b , provided that R^5 is not $-CH=CH-COOH$;

R^6 is selected from:

(1) C_{1-4} alkyl,
(2) C_{2-4} alkenyl,
(3) C_{2-4} alkynyl,

25 (4) $-OR^d$,
(5) halogen,
(6) $-CN$, and
(7) $-NRCR^d$,

wherein alkyl, alkenyl, and alkynyl are optionally substituted with one to four substituents independently selected from R^a ;

each R^a is independently selected from:

(1) $-OR^d$,
(2) $-NRCS(O)_mR^d$,
(3) halogen,
(4) $-S(O)_mR^d$,

35

(5) $-\text{S(O)}_m\text{NR}^c\text{R}^d$,

(6) $-\text{NR}^c\text{R}^d$,

(7) $-\text{C(O)}\text{R}^d$,

(8) $-\text{CO}_2\text{R}^d$,

5 (9) $-\text{CN}$,

(10) $-\text{C(O)}\text{NR}^c\text{R}^d$,

(11) $-\text{NR}^c\text{C(O)}\text{R}^d$,

(12) $-\text{NR}^c\text{C(O)}\text{OR}^d$,

(13) $-\text{NR}^c\text{C(O)}\text{NR}^c\text{R}^d$,

10 (14) $-\text{CF}_3$,

(15) $-\text{OCF}_3$, and

(16) cycloheteroalkyl;

each R^b is independently selected from:

(1) R^a ,

15 (2) C₁₋₁₀alkyl,

(3) oxo,

(4) aryl,

(5) arylC₁₋₄alkyl,

(6) heteroaryl, and

20 (7) heteroarylC₁₋₄alkyl;

R^c and R^d are independently selected from:

(1) hydrogen,

(2) C₁₋₁₀alkyl,

(3) C₂₋₁₀alkenyl,

25 (4) cycloalkyl,

(5) cycloalkyl-C₁₋₁₀alkyl;

(6) cycloheteroalkyl,

(7) cycloheteroalkyl-C₁₋₁₀alkyl;

(8) aryl,

30 (9) heteroaryl,

(10) aryl-C₁₋₁₀alkyl, and

(11) heteroaryl-C₁₋₁₀alkyl, or

R^c and R^d together with the atom(s) to which they are attached form a heterocyclic ring of 4 to 7

members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-Rg,

35 each R^c and R^d may be unsubstituted or substituted with one to three substituents selected from R_h;

each R^g is independently selected from: C₁₋₁₀alkyl, and -C(O)R^c;

each R^h is independently selected from:

- (1) halogen,
- (2) C₁₋₁₀alkyl,
- 5 (3) -O C₁₋₄alkyl,
- (4) -S (O)_m C₁₋₄alkyl,
- (5) -CN,
- (6) -CF₃, and
- (7) -OCF₃; and

10 m is selected from 0, 1 and 2.

2. The compound according to Claim 1, wherein R⁴ is selected from:

- (1) hydrogen, and
- (2) methyl;

15 and pharmaceutically acceptable salts thereof.

3. The compound according to Claim 2, wherein R⁴ is hydrogen;

and pharmaceutically acceptable salts thereof.

20 4. The compound according to Claim 2, wherein R³ is selected from hydrogen, methyl and ethyl; and pharmaceutically acceptable salts thereof.

25 5. The compound according to Claim 3, wherein R³ is methyl; and pharmaceutically acceptable salts thereof.

6. The compound according to Claim 4, wherein R¹ is selected from:

- (1) phenyl,
- (2) phenyl-C₁₋₄alkyl,
- (3) pyridyl, and
- 30 (4) pyridyl-C₁₋₄alkyl,

wherein each phenyl and pyridyl is optionally substituted with one or two substituents selected from halogen, methyl, trifluoromethyl, cyano and methoxy, and each pyridyl is optionally present as the N-oxide;

and pharmaceutically acceptable salts thereof.

35

7. The compound according to Claim 5, wherein R¹ is phenyl, unsubstituted or substituted with a halogen or cyano substituent; and pharmaceutically acceptable salts thereof.

8. The compound according to Claim 6, wherein R² is selected from:

- 5 (1) isopropyl,
- (2) isobutyl,
- (3) n-propyl,
- (4) n-butyl
- (5) cyclopropylmethyl,
- 10 (6) cyclobutylmethyl,
- (7) cyclopentylmethyl,
- (8) cyclohexylmethyl,
- (9) phenyl,
- (10) benzyl,
- 15 (11) phenylethyl,
- (12) 3-phenylpropyl,
- (13) 2-phenylpropyl, and
- (14) pyridylmethyl,

wherein each cycloalkyl, aryl and heteroaryl is optionally substituted with one or two R^b substituents
20 selected from halogen, trifluoromethyl, cyano, methoxycarbonyl, and methoxy;
and pharmaceutically acceptable salts thereof.

9. The compound according to Claim 7, wherein R² is 4-chlorobenzyl, and
pharmaceutically acceptable salts thereof.

25 10. The compound according to Claim 9, wherein R⁶ is selected from:

- (1) methyl,
- (2) hydroxyl,
- (3) halogen, and
- 30 (4) -CN;

and pharmaceutically acceptable salts thereof.

11. The compound according to Claim 9, wherein R⁵ is selected from:

- 35 (1) C₁-galkyl,
- (2) C₂-galkenyl,

- (3) cycloheteroalkyl-C₁₋₈alkyl,
- (4) aryl-C₁₋₈alkyl,
- (5) diaryl-C₁₋₄alkyl,
- (6) aryl-C₂₋₈alkenyl,
- 5 (7) heteroaryl-C₁₋₈alkyl,
- (8) -OR^d, and
- (9) -NRC^cRD^d,

wherein each alkyl or alkenyl is optionally substituted with one or two substituents independently selected from R^a, and each cycloalkyl, cycloheteroalkyl, aryl and heteroaryl is each optionally substituted with one to three substituents independently selected from R^b and wherein cycloheteroalkyl is selected from pyrrolidinyl, 2H-phthalazinyl, azabicyclo[2.2.1]heptanyl, benzoxapinyl, morpholinyl, piperazinyl, dihydroimidazo[2,1-b]thiazolyl, and piperidinyl; aryl is selected from phenyl and naphthyl; and heteroaryl is selected from pyridyl, pyrimidinyl, pyridazinyl, pyrazolyl, triazolyl, benzothiazolyl, benzoxazolinyl, isoxazolyl, indolyl and thiazolyl;

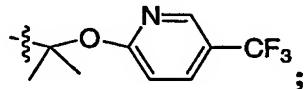
15 and pharmaceutically acceptable salts thereof.

12. The compound according to Claim 10, wherein R⁵ is selected from:

- (1) C₁₋₈alkyl substituted with -OR^d or NRC^cRD^d,
- (2) C₂₋₈ alkenyl substituted with OR^d or NRC^cRD^d, and
- 20 (3) phenyl-C₁₋₈ alkyl wherein phenyl is substituted with one to three R^b substituents;

and pharmaceutically acceptable salts thereof.

13. The compound according to Claim 12, wherein R⁵ is:



25 and pharmaceutically acceptable salts thereof.

14. The compound according to Claim 1, selected from:

- N-{[3-(4-chlorophenyl)-2-(3-bromophenyl)-1,2-dimethyl]propyl}-2-(5-trifluoromethyl-2-pyridyloxy)-2-methylpropanamide,
- 30 N-{[3-(4-chlorophenyl)-2-cyano-2-phenyl-1-methyl]propyl}-2-(5-trifluoromethyl-2-pyridyloxy)-2-methylpropanamide,
- N-{[3-(4-chlorophenyl)-2-(3-bromophenyl)-2-hydroxy]propyl}-2-(5-trifluoromethyl-2-pyridyloxy)-2-methylpropanamide,

N-{[3-(4-chlorophenyl)-2-(3-bromophenyl)-2-fluoro-1(S)-methyl]propyl}-2-(5-trifluoromethyl-2-pyridyloxy)-2-methylpropanamide,

N-{[3-(4-chlorophenyl)-2-(3-cyanophenyl)-2-fluoro-1(S)-methyl]propyl}-2-(5-trifluoromethyl-2-pyridyloxy)-2-methylpropanamide,

5 *N*-{[3-(4-chlorophenyl)-2-(3-cyano phenyl)-1,2-dimethyl]propyl}-2-(5-trifluoromethyl-2-pyridyloxy)-2-methylpropanamide,

N-{[3-(4-chlorophenyl)-2-(3-bromophenyl)-2-hydroxy-1(S)-methyl]propyl}-2-(5-trifluoromethyl-2-pyridyloxy)-2-methylpropanamide,

10 *N*-{[3-(4-chlorophenyl)-2-(3-bromophenyl)-2-hydroxy-1(R)-methyl]propyl}-2-(5-trifluoromethyl-2-pyridyloxy)-2-methylpropanamide,

1-{[3-(4-chlorophenyl)-2-(3-cyanophenyl)-2-fluoro-1(S)-methyl]propyl}-3-[2-(phenyl)ethyl]urea,

1-{[3-(4-chlorophenyl)-2-(3-cyanophenyl)-2-hydroxy-1(S)-methyl]propyl}-3-[2-(4-chlorophenyl)ethyl]urea,

15 1-{[3-(4-chlorophenyl)-2-(3-cyanophenyl)-2-hydroxy-1(S)-methyl]propyl}-3-methyl-3-[2-(phenyl)ethyl]urea,

1-{[3-(4-chlorophenyl)-2-(3-cyanophenyl)-2-hydroxy-1(S)-methyl]propyl}-3-[1-(4-chlorophenyl)ethyl]urea,

N-{[3-(4-chlorophenyl)-2-(3-cyanophenyl)-2-hydroxy-1(S)-methyl]propyl}-2-phenylbutanamide,

20 *N*-{[3-(4-chlorophenyl)-2-(3-cyanophenyl)-2-fluoro-1(S)-methyl]propyl}-1-ethyl-cyclobutanecarboxamide,

N-{[3-(4-chlorophenyl)-2-(3-cyanophenyl)-2-hydroxy-1(S)-methyl]propyl}-1-phenyl-cyclobutanecarboxamide,

25 *N*-{[3-(4-chlorophenyl)-2-(3-cyanophenyl)-2-hydroxy-1(S)-methyl]propyl}-2-phenyl-butanamide, and pharmaceutically acceptable salts thereof.

25

15. A method of treating a disease mediated by the Cannabinoid-1 receptor comprising administration to a patient in need of such treatment of a therapeutically effective amount of a compound according to Claim 1.

30 16. The method according to Claim 15 wherein the disease mediated by the Cannabinoid-1 receptor is selected from: psychosis, memory deficit, cognitive disorders, migraine, neuropathy, neuro-inflammatory disorders, cerebral vascular accidents, head trauma, anxiety disorders, stress, epilepsy, Parkinson's disease, schizophrenia, substance abuse disorders, constipation, chronic intestinal pseudo-obstruction, cirrhosis of the liver, asthma, obesity, and other eating disorders associated with excessive food intake.

17. The method according to Claim 16 wherein the disease mediated by the Cannabinoid-1 receptor is an eating disorder associated with excessive food intake.

18. The method according to Claim 17 wherein the eating disorder associated with excessive food intake is selected from obesity, bulimia nervosa, and compulsive eating disorders.

19. The method according to Claim 18 wherein the eating disorder associated with excessive food intake is obesity.

10 20. A method of preventing obesity in a person at risk for obesity comprising administration to said person of about 0.001 mg to about 100 mg per kg of a compound according to Claim 1.

15 21. A composition comprising a compound according to Claim 1 and a pharmaceutically acceptable carrier.

22. The use of a compound according to Claim 1, for the manufacture of a medicament useful for the treatment of a disease mediated by the Cannabinoid-1 receptor in a human patient in need of such treatment.

20 23. The use according to Claim 22 wherein the disease mediated by the Cannabinoid-1 receptor is selected from: psychosis, memory deficit, cognitive disorders, migraine, neuropathy, neuro-inflammatory disorders, cerebral vascular accidents, head trauma, anxiety disorders, stress, epilepsy, Parkinson's disease, schizophrenia, substance abuse disorders, constipation, chronic intestinal pseudo-obstruction, cirrhosis of the liver, asthma, obesity, and other eating disorders associated with excessive food intake.

24. The use according to Claim 23 wherein the disease mediated by the Cannabinoid-1 receptor is an eating disorder associated with excessive food intake.

30 25. The use according to Claim 24, wherein the eating disorder associated with excessive food intake is selected from obesity, bulimia nervosa, and compulsive eating disorders.

26. The use according to Claim 25 wherein the eating disorder associated with excessive food intake is obesity.

27. The use of a compound according to Claim 1 for the manufacture of a medicament for the prevention of obesity in a person at risk therefor.